

This invention provides a system and method for computer simulation of image-guided diagnostic and therapeutic procedures such as vascular catheterization, angioplasty, stent, coil and graft placement, embolotherapy and drug infusion therapy. In a particularly preferred aspect, the system is configured to resemble a cardiovascular catheterization laboratory where interventional radiology procedures are performed. A first user can interactively manipulate therapeutic catheters, guidewires and other medical devices in real-time while viewing patient-specific medical image data sets in a manner similar to that encountered in a clinical procedure.

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